Facilities and Equipment

CLASSROOM

To efficiently switch from the classroom instructional mode to the range and vice versa, the classroom and range should be located in close relative proximity. The classroom should be comfortable and large enough to accommodate the riders and one Instructor. The following equipment is needed:

- Desks or chairs with writing space
- Instructor's desk or podium and chair
- A table for audiovisual equipment
- Screen
- Chalkboard or flip chart
- Blackout shades for daytime showing of audiovisuals
- Videocassette player and monitor
- 35mm slide projector
- Overhead projector.

RANGE

The area on which the riders participate in the on-cycle maneuvers is typically referred to as the range. This is the hands-on portion of the program. It requires a paved surface and is usually an existing parking lot. The paved area is designed to accommodate 12 riders. Guidelines include:

- The overall available space should be approximately 200' x 300'.
- Approximately 20' should be available on all sides — a buffer area for run-off.
- The area should be as flat as possible — no more than a 5° slope.
- Entrance/exits to and from the parking lot should be prohibited to all traffic, including bicyclists and pedestrians.
- The area should be free of potholes, gratings, poles, sand, lightpoles, parking curbs or other fixed objects.

INCLEMENT WEATHER

Safety of the students and Instructional staff should remain the final determining factor in deciding whether training will be conducted. However, state policies and procedures, area weather concerns, range surface conditions and the practicalities of being a public service organization must be taken into consideration as well. The decision to conduct any training, based on the ability to meet MSF's educational and safety standards, rests with motorcycle safety administrators and the Instructors conducting the training.

The Motorcycle Safety Foundation takes the position that training not be conducted during a thunderstorm, snowstorm, windstorm, with ice on the range or if the Instructor(s) determine the safety of the students to be at risk.

State regulations should be formulated concerning when and under what weather conditions the *RiderCourses®* will be conducted.

MOTORCYCLES

Each rider must provide their own motorcycle with proof of insurance and ownership. If the motorcycle is not owned by the rider, the Instructor should request written approval from the owner to use the motorcycle in the course.

Most street-legal motorcycles may be used for the range exercises. Extensively modified motorcycles could create an unsafe riding condition for the rider, Instructor and other participants.

All motorcycles must pass the pre-ride inspection using the T-CLOCK (located in IX — Supplementary Information). The inspection is to be conducted by the Instructor. Motorcycles with defects that could impair handling or control should not be permitted on the range. This inspection is not intended to replace the manufacturer's recommended servicing. If there is a reasonable doubt about a motorcycle's safe condition, DO NOT ALLOW IT ON THE RANGE.

When to inspect the machines is left to the discretion of the course sponsor and/or Instructors. Typically, this task is completed as the riders arrive,

during lunch, by an Instructor while the riders are in the classroom or as the initial task on the range. The bottom line is that the motorcycles be inspected prior to being used on the range.

The ERC exercises are generally within the 15-25 MPH range. Slow-speed operation over long periods of time may cause some motorcycles to overheat. Caution riders to be aware of engine temperature and running condition.

PERSONAL GEAR

All riders and Instructors must wear the following protective gear on the range:

- Helmet and eye protection
- Over-the-ankle footwear (not cloth, canvas, etc.)
- Long-sleeved shirt or jacket
- Non-flare denim pants or material of equivalent durability
- Full-fingered gloves, preferably leather

ERC RANGE LAYOUT PROCEDURES

If you have a *Motorcycle RiderCourse:Riding and Street Skills®* range already painted, only some additional dots need be placed on the range surface to make it capable of supporting the *Experienced RiderCourse®* range activities. You will need:

- 300-foot tape measure
- chalk (lumber crayon)
- paint (6 colors)
- 30 cones
- cardboard to cut templates
- chalkline — not necessary, but helpful

If you are laying out the ERC range on an existing *MRC:RSS* range, begin at step 9.

If you are laying it out from scratch, begin at step 1.

STEP 1 Boundary Layout — Line A to D.

The first step is to establish a true rectangle (120'x 220'). This is done by selecting a baseline layout. Label point A. From point A, measure 120' to establish point D. Label point D.
See Diagram A.

Note: Remember to keep your 20' buffer area all around the perimeter.

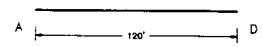


DIAGRAM A

STEP 2 Boundary Layout — Arc Points B and C.

From point A, swing a 220' arc toward point B. Then from point A, swing a 250' 6" arc toward point C. See Diagram B.

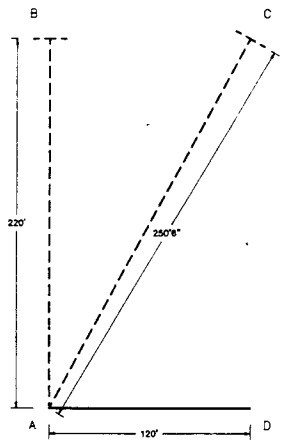


DIAGRAM B

STEP 3 **Boundary Layout — Establish Points B and C.**

From point D, swing a 220' arc toward point C. Then, from point D, swing a 250'6" arc toward point B. Where the arcs at points B and C intersect are the true corners of your rectangle. Label points B and C. See Diagram C.

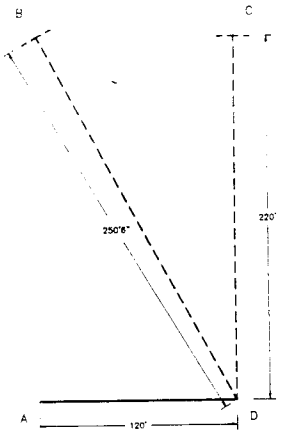


DIAGRAM C

STEP 4 **Boundary Layout — Connect Four Corners.**

Mark the boundaries by connecting points A, B, C, and D. This can be done by using a chalkline or by pounding a nail into the pavement at each point and connecting a string around each of the four corners. See Diagram D.

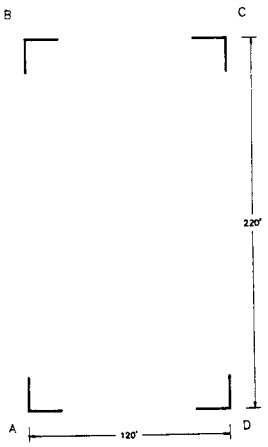


DIAGRAM D

STEP 5 **Marking Large Circles — Locating Center of Circles.**

The next step is to lay out the two large circles needed. First locate the center of each circle by measuring 60' from point A toward point B and make a mark. Then measure 60' from point D toward point C and make a mark. Stretch your tape across the range at these two points and mark at the 60' point. This is the center of your first circle. Repeat this step measuring from points B and C. The distance from center to center circles should be 100'. See Diagram E.

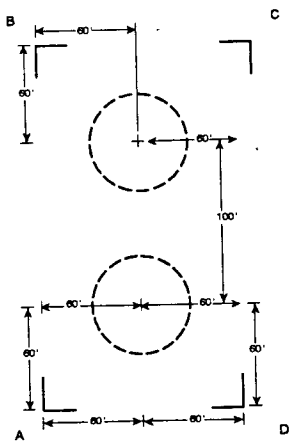


DIAGRAM E

STEP 6 Marking Large Circles.

Using a 30' piece of string or 30' tape measure, begin chalking the circumference of the circles. This will require two people, one to hold one end of the string at the center point and the other to outline the circles. Attach the chalk at the other end of the string and mark the circumference. See Diagram F.

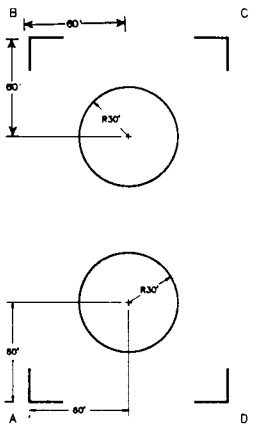


DIAGRAM F

STEP 7 Turning Arc — Layout.

First you must find the pivot point for marking the arcs. Begin by measuring 39' down the perimeter from point B toward point A. From point C, measure down the perimeter 39' toward point D. From the two points 39' from points C and B, extend a line across the width of the perimeter. From long perimeter side B/A, measure 39' on this line. This represents the pivot for the turning arc. From this point, measure back 20' and 28' to mark the entry for the arc. On the short side of the perimeter from point B toward point C, measure 39'. Connect this point to the pivot. Again, from the pivot of your turning arc, measure 20' and 28' to mark the exit for the arc. You have created a 39' square, the pivot being diagonal to the corner of the range. Repeat this procedure to create the pivot point near the D corner. See diagram G.

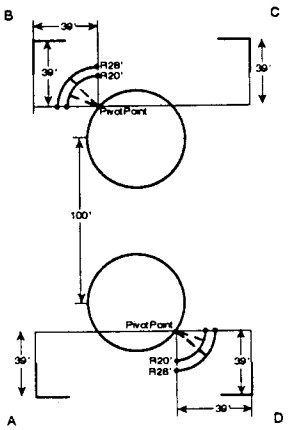


DIAGRAM G

STEP 8 Marking Turning Arcs.

From the pivot point using a 20' piece of string and chalk, swing a large arc. Repeat this using a 28' piece of string. Repeat step 8 at the D corner. See Diagram H.

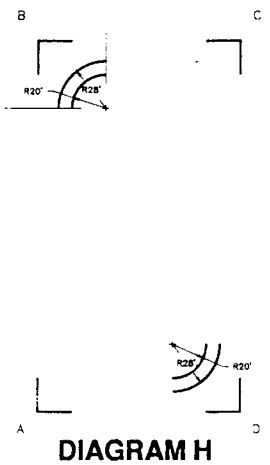


DIAGRAM H

STEP 9 Establishing Cone Locations.

Stretch your tape up the range from point A to point B. Begin marking locations as shown in Diagram I. When marking these locations, write the footage with chalk near the mark for a later reference. Repeat this step from point D to C.

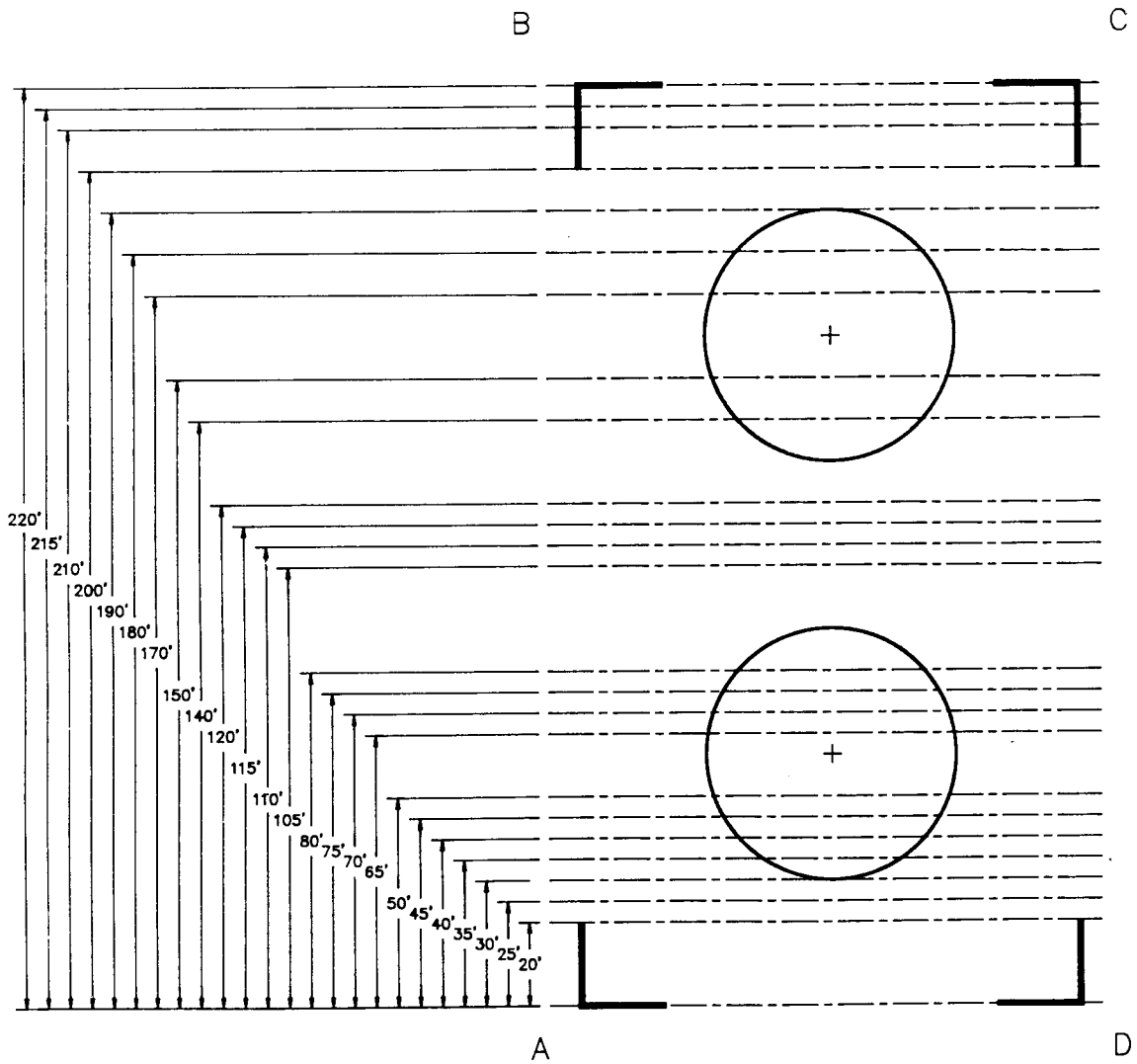
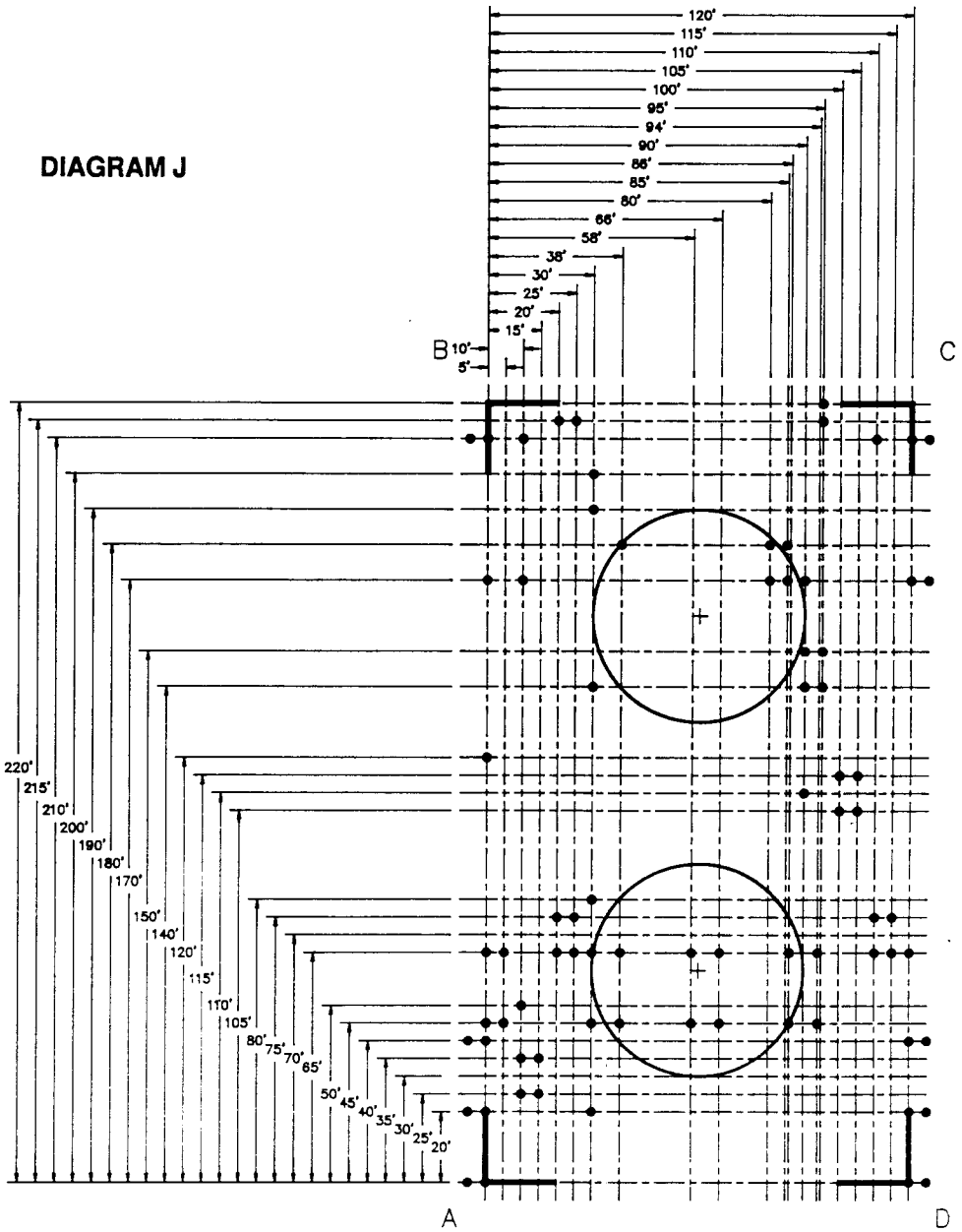


DIAGRAM I

STEP 10 Establishing Cone Locations.

Once you have done all the marks on the long sides you can begin marking the actual cone locations. With two people, begin stretching your tape across the range at the marks on the long sides. Start at the end marked A and D. Move up the range, stretching your tape across and marking cone locations as shown in Diagram J. When marking cone locations, indicate footage by writing near the mark the measurements (Example 20'/30'). This will help you determine the correct cone locations for the next step.

DIAGRAM J



PAINTING THE RANGE CONE LOCATIONS

First paint down the circles and arcs using your base color (usually yellow). Using a piece of cardboard with a 3" square cut out, begin painting all the cone locations using your base color. Allow time for base paint to dry. Using the remaining five colors of paint, you can begin color coding the cone locations. A simple way to do this is to use a 2" dot for the cone locations of the exercises and a 2" triangle for the start gates. This will help to avoid any confusion as to where cones should be for a particular exercise. This is especially helpful since many cone locations for different exercises are very close together. The following diagrams will assist you in laying out and color coding exercises. An alternative to coding by color is to code by shape. Use small triangles, squares, etc., instead of the normal painted dots.

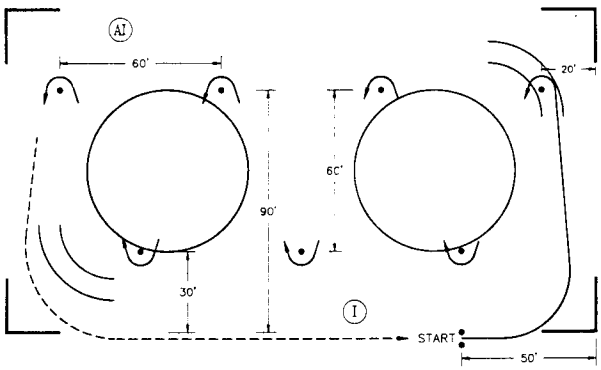


DIAGRAM 1, COLOR 1

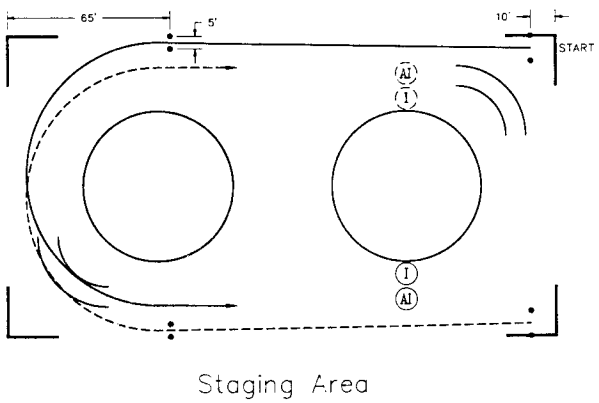


DIAGRAM 2, COLOR 2

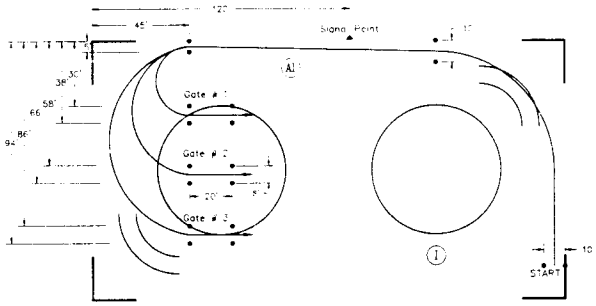


DIAGRAM 3, COLOR 3

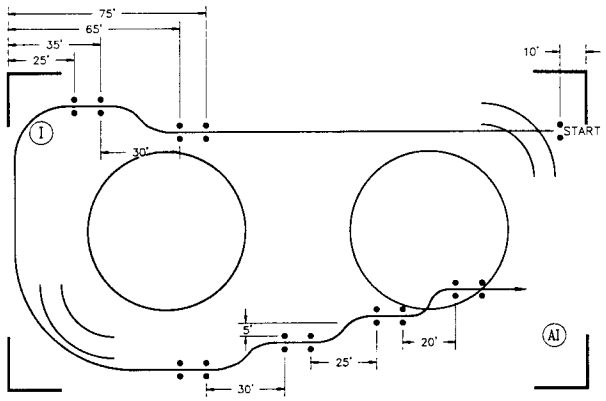


DIAGRAM 4, COLOR 4

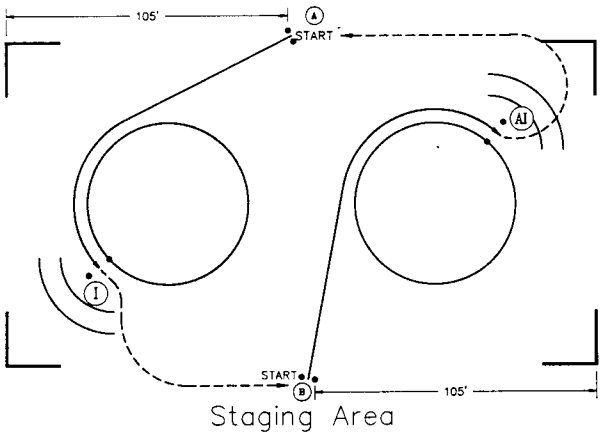


DIAGRAM 5, COLOR 5